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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/867,063	05/29/2001	Ralph Rhein	CLR-103US	5733

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EXAMINER

DICUS, TAMRA

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 01/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/867,063

Applicant(s)

RHEIN, RALPH

Examiner

Tamra L. Dicus

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 32-37 and 41-67 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 32-37 and 41-67 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

The examiner acknowledges cancellation of claims 38-40.

Response to Amendment

The claim objections and 112 rejections are withdrawn due to Applicant's amendments.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 32-37, and 41-61 stand rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,143,407 to Lythgoe et al. in view of USPN 6,423,406 to Bilodeau and USPN 6,080,261 to Popat et al. as previously set forth in the Office action mailed 07/01/03.

3. To the new limitation, "such that the image is supported only by the adhesive layer", does not change the structure. As previously set forth, Lythgoe teaches a flexible dry transfer sheet comprising in this order: a flexible carrier sheet 1 of heat resistant polymer film/ an adherent thin release layer 2/ one or more indicium or other printed design 5 in heat-fused plastisol ink/ a coating of a pressure sensitive adhesive 3 and 4. Further, this support can also be achieved by Lythgoe because Lythgoe explains the printing the adhesive over the plastisol ink design layer can be reversed where the adhesive is printed first and then the plastisol ink design at col. 5, lines 34-36. Thus, the image is supported only by the adhesive layer because the same order and structure is taught by Lythgoe.

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4. To instant claims 37 and 45, to the new limitation, the connection between the release and image to achieve separation between the release and the image is also provided by Lythgoe because the dry transfer is pressed into contact with a receptor surface and causes the indicia 5 layer to release from the carrier so that the indicia stays on the receptor surface as explained at col. 5, line 62 bridging col. 6, line 12. The adhesive is low tack so it can shear very easily (col. 4, lines 1-3, lines 20-25, and 50-60, col. 5, line 40, and col. 6, line 2 of Lythgoe).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 62 (new) is rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,143,407 to Lythgoe et al. in view of USPN 6,423,406 to Bilodeau and USPN 6,080,261 to Popat et al. as applied to claim 32 as set forth in the Office action mailed 07/01/03.

7. To new claim 62, Lythgoe teaches the adhesive may be acrylic. Lythgoe explains the adhesive of the instant invention may be printed in register (see col. 3, lines 8-21) and when doing so the water-based acrylic adhesive is the adhesive of "choice" for such application.

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8. Claims 63-67 (new) are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,143,407 to Lythgoe et al. in view of USPN 6,423,406 to Bilodeau and USPN 6,080,261 to Popat et al.

9. Lythgoe teaches a flexible dry transfer sheet comprising referring to the drawing, a flexible carrier sheet 1 of heat resistant polymer film such as polyester is preferably transparent or translucent and is coated with an adherent thin release layer 2. On the surface of the release layer one or more indicium or other design 5 is printed in a heat-fused plastisol ink. Coated over the indicium 5 and extending over the surface of the release layer is a coating of a pressure sensitive adhesive 3. This adhesive has an intrinsically low tack so that it forms a bond of low strength with a substrate. See col. 5, lines 60-68 and col. 6, line 1. Also see Example 1 and Figure 1. Lythgoe teaches a transfer label teaching acrylics are PSAs at col. 7, lines 7-8. Meeting limitations of claims 43, 44, 47, 56, and 59. Lythgoe teaches a release layer on the carrier (col. 9, lines 60-68). The image 5 is bonded to the release 2 (instant claim 63) see the Figure and col. 5, lines 7-11, and lines 65-66. To new claim 67, Lythgoe teaches the adhesive may be acrylic. Lythgoe explains the adhesive of the instant invention may be printed in register (see col. 3, lines 8-21) and when doing so the water-based acrylic adhesive is the adhesive of "choice" for such application.

10. Lythgoe does not teach printing in a multiple number of ink layers and "picture quality" (new claim 66). However, Bilodeau teaches a graphic transfer sheet. At col. 2, lines 31-35, inks are printed in a number of ink layers, inherently providing "picture quality" since the same materials are taught (meeting new claims 48, 49, 60, and 61). Hence, it would have been

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obvious to one of ordinary skill in the art to modify the sheet of Lythgoe to further include multiple inks since Bilodeau teaches providing multiple inks as a design.

11. Lythgoe does not state the combined thickness of less than 5 mils (claims 63-65).

However, it would have been obvious to one of ordinary skill in the art to produce a thickness less than 5 mils, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272. The thickness directly effects the coating weight.

Further regarding claims 63-65, the thicknesses of the image, adhesive layer, and release-finish coating is not taught by Lythgoe. However, Popat teaches an adhesive image transfer where an image is in an adhesive layer having a thickness between 0.5 and 2 mils, a release coating is 0.1 mils (col. 4, lines 1-13), see also col. 6, lines 55-63, totaling to a thickness range less than 3 and/or 5 mils. Hence it would have been obvious to one of ordinary skill in the art to produce a thickness less than 3/5 mils, since it Popat teaches it is conventional to do so at col. 4, lines 1-13 and col. 6, lines 55-63.

Response to Arguments

12. Applicant's arguments filed 07-06-04 have been considered but are not persuasive because Lythgoe essentially teaches the structure as claimed. Applicant argues that because Lythgoe has a plastisol ink design layer, the image cannot be supported only by the adhesive layer. However, the Applicant has confused the plastisol ink design layer to be separate from the image layer. The image layer is equivalent to the plastisol ink design layer (see Lythgoe at col. 5, line 34 and lines 40-42. See also col. 1, line 68-col.2, line 1. Further Applicant argues that the

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image of the instant invention is comprised of a pattern of minute ink dots which are not cohered to one another by any other material, however, the pattern of minute ink dots are not instantly recited in any claim. Applicant alleges Lythgoe is to a homogeneous plastisol ink and does not contemplate use of multiple inks to form "picture quality" images. The Applicant may not have considered Lythgoe teaching the design layer is indicia in plastisol ink that is printed (col. 5, line 41) and may contain other inks via screen printing in Example 3, which means Lythgoe would desire use of multiple inks, which is explicitly provided for by Bilodeau at col. 12, lines 64-66 as Bilodeau explains an ink design layer may have a single ink layer or a plurality of ink layers using conventional inks, thus forming "picture quality" images. Further, the Applicant has not limited the term "picture quality" to include certain values to differentiate the ink layers provided for by the combination of prior art. Applicant argues Lythgoe teaches against using a "thin image" because of the thickness of the indicia and adhesive, however, the Applicant does not claim a "thin image". Further, as previously set forth, thicknesses of the indicia, adhesive, or image are all optimizable characteristics. Further set forth, Popat was used to teach the image and adhesive having a thickness between 0.5 and 2 mils and a release of 0.1 mils (col. 4, lines 1-13 and col. 6, lines 55-63 of Popat). Applicant argues the goal of Lythgoe is different from the edge discernment and durability of the applied image of Applicant; however, Lythgoe does not have to teach the same goal because the combination teaches the claimed invention. Any goal or property that follows is a result from the transfer already provided for by the prior art. Applicant argues that Lythgoe teaches acrylic adhesives are not operable (col. 3, lines 19-21) since acrylic adhesives are unaffected by migration of plasticizer. However Applicant has misinterpreted this citing because Lythgoe explains what is disadvantageous when printing adhesives in register is

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the plastisol inks absorbed into the PSA, not the acrylic. The water-based acrylic adhesive is the adhesive of "choice" for application. Lythgoe explains the adhesive of the instant invention may indeed be printed in register (see col. 3, lines 8-21) and concludes that it is normal practice to formulate adhesives for plastisols using water based adhesives (col. 3, lines 33-36). All prior art teaches ink and their use in transfers, despite Applicant's contentions to the operability of the system using Bilodeau, Popat, and Lythgoe inks. Applicant has not disproved the inks would not work as Applicant intends by submission of objective evidence.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

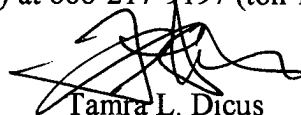
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamra L. Dicus whose telephone number is 571-272-1519. The examiner can normally be reached on Monday-Friday, 7:00-4:30 p.m., alternate Fridays.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tamra L. Dicus
Examiner
Art Unit 1774

11/13/04



RENA DYE
SUPERVISORY PATENT EXAMINER
A.U. 1774 11/15/04